

Sciatica

The Sciatic Nerve is formed by a number of nerve roots that arise from the lower levels of the spinal cord. These nerve roots join to form one thick nerve that passes through the buttock all the way down the back of the leg to the foot. The sciatic nerve and its branches send and receive impulses which provide sensation for the outer part of the lower leg and foot and supply all the muscles below the knee, the hamstrings (back of thigh) and the inner thigh.

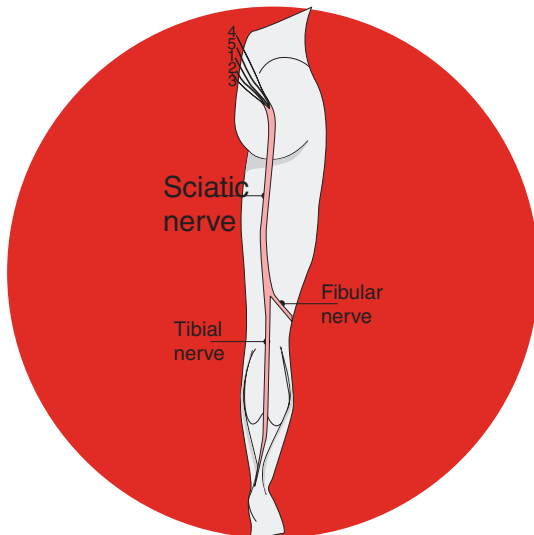
Sciatica is a name given to any condition that produces pain because of irritation of the sciatic nerve. Most commonly, this irritation occurs somewhere close to its origin in the low back. However, the symptoms are often experienced as referred pain, away from the site of irritation, somewhere from the buttock to the toes.

TREATMENT

Because Sciatica may be caused by a number of different irritants over the length of the sciatic nerve, the site and pathology involved must first be identified. Once this is achieved, treatment is aimed at reducing the extent of the irritation. This may be done using a variety of techniques including:

- Medications, which may be prescribed to reduce inflammation and decrease the sensitivity of the nerve.
- Muscle relaxation, deep tissue mobilisation, stretching or traction, electrotherapy and graduated exercise protocols which may be administered by your physiotherapist to treat symptoms and prevent recurrence.

In severe cases, more invasive techniques including injections and even surgery may have to be considered.

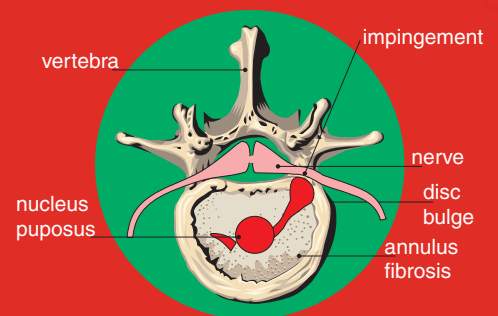


IRRITATION OF NERVE TISSUE

occurs if the nerve is overstretched, squashed, chemically irritated or directly injured (eg. knife wound, broken bone). Nerve irritation can cause a variety of symptoms such as pins and needles or tingling, numbness, muscle weakness and pain.

These may be felt anywhere in the region that the nerve supplies. Irritation of the sciatic nerve can occur from its roots in the spine right down to the foot. Examples of causes of irritation include:

1. Disc bulge - If a portion of disc bulges onto one of the nerve roots which forms the sciatic nerve, the entire nerve may become sensitised. Symptoms may be experienced in the low back, the buttock, the back of the leg and calf, and/or into the foot. This type of compression of the nerve by a disc can prevent the normal flow of impulses through the nerve also resulting in muscle weakness and wasting.
2. Muscle tightness or tearing - If the nerve passes through muscles that are tight, the nerve may be compressed. If a muscle is torn, scar tissue develops which may irritate the sciatic nerve. This commonly occurs in the buttock and hamstring muscles and the resulting symptoms may mimic those of a hamstring tear.
3. Overstretching - This is most significant if the nerve is already sensitised by another injury, causing an aggravation of the symptoms.



A portion of disc bulging onto a single nerve root may cause sensitivity of the entire sciatic nerve.

Disclaimer : The material contained in these pages is intended as a guide only and does not constitute advice or treatment. For further information, please see your qualified health professional.



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